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**AMENDMENTS TO THE CLAIMS**

Claim 1 (currently amended): A method for controlling an operating temperature of a  
5 computer system, the method comprising:  
monitoring a rotational speed of at least a cooling fan of the computer system,  
the rotational speed of the cooling fan being controlled by a fan power;  
monitoring a vital temperature of the computer system; and  
calculating a change in the vital temperature; and  
10 setting the fan power based on the calculated change in the vital  
temperature; wherein when the change in the vital temperature is  
negative, the fan power is reduced to reduce the fan rotational speed;  
and when the change in the vital temperature is positive, the fan power  
is increased to increase the fan rotational speed.

15 Claim 2 (original): The method of claim 1 wherein setting the fan power further  
comprises:  
increasing the fan power by a first power when the vital temperature  
increases by a first temperature, the first power being directly  
20 proportional to the first temperature.

Claim 3 (original): The method of claim 1 wherein setting the fan power further  
comprises:  
decreasing the fan power by a second power when the vital temperature  
25 decreases by a second temperature, the second power being directly  
proportional to the second temperature.

Claim 4 (original): The method of claim 1 wherein setting the fan power further  
comprises:  
30 maintaining the fan power when the vital temperature increases and the vital  
temperature is below a set temperature;  
maintaining the fan power when the vital temperature remains constant and

the vital temperature is above the set temperature; and  
decreasing the fan power by a third power when the vital temperature  
remains constant and the vital temperature is below the set temperature.

- 5    Claim 5 (original): The method of claim 4 further comprising resetting the fan power to a fixed fan power corresponding to a fixed fan speed when the set fan speed differs from the fixed fan speed and the vital temperature differs from the set temperature by at least a predetermined amount.
- 10   Claim 6 (original): The method of claim 1 further comprising detecting a cooling fan maximum rotational speed and a corresponding maximum fan power such that setting the fan power is according to a percentage of the cooling fan maximum rotational speed.
- 15   Claim 7 (original): The method of claim 1 wherein the at least a cooling fan includes a CPU cooling fan of a CPU of the computer system and an auxiliary cooling fan of the computer system, and the vital temperature is obtained from an on-die thermal monitoring transistor of the CPU.
- 20   Claim 8 (original): The method of claim 1 wherein the cooling fan is a power supply cooling fan of a power supply of the computer system, and the vital temperature is obtained from an on-die thermal monitoring transistor of the CPU.
- 25   Claim 9 (original): The method of claim 1 wherein the at least a cooling fan includes a CPU cooling fan of a CPU of the computer system, an auxiliary cooling fan of the computer system, and a power supply cooling fan of a power supply of the computer system, and the vital temperature is obtained from an on-die thermal monitoring transistor of the CPU.
- 30   Claim 10 (original): The method of claim 1 wherein setting the fan power is controlled by a relation stored in a random access memory or hard disk and accessible by an operating system during an operating system execution of the computer system.

Claim 11 (original): The method of claim 1 wherein setting the fan power is controlled by a relation stored in a BIOS memory and accessible by a BIOS of the computer system during a POST or boot of the computer system.

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Claim 12 (currently amended): A cooling system for a computer system, the cooling system comprising:

at least a cooling fan for providing cooling to the computer system;

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a fan input-output module electrically connected to the fan for transmitting a control signal to the fan, the control signal controlling the rotational speed of the fan;

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a chipset interface electrically connected to the fan input-output module for calculating a change in a vital temperature, generating the fan control signal based on the calculated change in the vital temperature of the computer system, and outputting the fan control signal to the fan input-output module;

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a controller electrically connected to the chipset interface for receiving the vital temperature and forwarding the vital temperature to the chipset interface; and

a temperature transducer for measuring the vital temperature and outputting the vital temperature to the controller.

Claim 13 (original): The cooling system of claim 12 further comprising:

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a memory electrically connected to the chipset interface for storing at least a relation relating the fan control signal to the vital temperature.

Claim 14 (original): The cooling system of claim 13 wherein the memory is a random access memory or a hard disk and is accessible by an operating system of the computer system.

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Claim 15 (original): The cooling system of claim 13 wherein the memory is a BIOS memory accessible by a BIOS of the computer system during a POST or boot of

the computer system.

Claim 16 (original): The cooling system of claim 12 wherein the at least a cooling fan includes a CPU cooling fan of a CPU of the computer system and an auxiliary  
5 cooling fan of the computer system, and the temperature transducer is an on-die thermal monitoring transistor of the CPU.

Claim 17 (original): The cooling system of claim 12 wherein the cooling fan is a power supply cooling fan of a power supply of the computer system, and the  
10 temperature transducer is an on-die thermal monitoring transistor of the CPU.

Claim 18 (original): The cooling system of claim 12 wherein the at least a cooling fan includes a CPU cooling fan of a CPU of the computer system, an auxiliary cooling fan of the computer system, and a power supply cooling fan of a power supply of  
15 the computer system, and the vital temperature is obtained from an on-die thermal monitoring transistor of the CPU.

Claim 19 (original): The cooling system of claim 12 further comprising a user interface electrically connected to the controller, the user interface comprising a  
20 display device and an input device for receiving control parameters from an external source; wherein the controller references the control parameters to generate the fan control signal.

Claim 20 (currently amended): A method for controlling an operating temperature of a  
25 computer system, the method comprising:

monitoring a rotational speed of a cooling fan installed in a power supply of the computer system, the rotational speed of the cooling fan being controlled by a fan power;  
monitoring a vital temperature of the computer system; and  
30 calculating a change in the vital temperature; and  
setting the fan power according to the calculated change in the vital temperature to control the rotational speed of the power supply cooling

fan.

Claim 21 (original): The method of claim 20 wherein setting the fan power further comprises:

- 5           increasing the fan power by a first power when the vital temperature increases by a first temperature, the first power being directly proportional to the first temperature.

Claim 22 (original): The method of claim 20 wherein setting the fan power further comprises:

- 10           decreasing the fan power by a second power when the vital temperature decreases by a second temperature, the second power being directly proportional to the second temperature.

Claim 23 (original): The method of claim 20 wherein setting the fan power further comprises:

- maintaining the fan power when the vital temperature increases and the vital temperature is below a set temperature;
- maintaining the fan power when the vital temperature remains constant and the vital temperature is above the set temperature; and
- 15           decreasing the fan power by a third power when the vital temperature remains constant and the vital temperature is below the set temperature.

Claim 24 (original): The method of claim 23 further comprising resetting the fan power to a fixed fan power corresponding to a fixed fan speed when the set fan speed differs from the fixed fan speed and the vital temperature differs from the set temperature by at least a predetermined amount.

Claim 25 (original): The method of claim 20 further comprising detecting a cooling fan maximum rotational speed and a corresponding maximum fan power such that setting the fan power is according to a percentage of the cooling fan maximum rotational speed.

Claim 26 (original): The method of claim 20 wherein the vital temperature is obtained from an on-die thermal monitoring transistor of a CPU of the computer system.

5 Claim 27 (original): The method of claim 20 wherein setting the fan power is controlled by a relation stored in a random access memory or hard disk and accessible by an operating system during an operating system execution of the computer system.

10 Claim 28 (original): The method of claim 20 wherein setting the fan power is controlled by a relation stored in a BIOS memory and accessible by a BIOS of the computer system during a POST or boot of the computer system.

Claim 29 (currently amended): A cooling system for a computer system, the cooling  
15 system comprising:

a cooling fan installed in a power supply of the computer system;  
a fan input-output module electrically connected to the fan for transmitting a control signal to the fan, the control signal controlling the rotational speed of the fan;

20 a chipset interface electrically connected to the fan input-output module for calculating a change in a vital temperature, generating the fan control signal based on a the calculated change in a the vital temperature of the computer system, and outputting the fan control signal to the fan input-output module;

25 a controller electrically connected to the chipset interface for receiving the vital temperature and forwarding the vital temperature to the chipset interface; and

a temperature transducer for measuring the vital temperature and outputting the vital temperature to the controller.

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Claim 30 (original): The cooling system of claim 29 further comprising:

a memory electrically connected to the chipset interface for storing at least a

relation relating the fan control signal to the vital temperature.

5 Claim 31 (original): The cooling system of claim 30 wherein the memory is a random access memory or a hard disk and is accessible by an operating system of the computer system.

10 Claim 32 (original): The cooling system of claim 30 wherein the memory is a BIOS memory accessible by a BIOS of the computer system during a POST or boot of the computer system.

Claim 33 (original): The cooling system of claim 29 wherein the temperature transducer is an on-die thermal monitoring transistor of a CPU of the computer system.

15 Claim 34 (original): The cooling system of claim 29 further comprising a user interface electrically connected to the controller, the user interface comprising a display device and an input device for receiving control parameters from an external source; wherein the controller references the control parameters to generate the fan control signal.

20 Claim 35 (new): A method for controlling an operating temperature of a computer system, the method comprising:  
monitoring a rotational speed of at least a cooling fan of the computer system, the rotational speed of the cooling fan being controlled by a fan power;  
25 monitoring a vital temperature of the computer system; and  
setting the fan power based on a change in the vital temperature; wherein when the change in the vital temperature is negative, the fan power is reduced to reduce the fan rotational speed; and when the change in the vital temperature is positive, the fan power is increased to increase the fan rotational speed;  
30 wherein setting the fan power further comprises:  
maintaining the fan power when the vital temperature increases and the vital temperature is below a set temperature;

maintaining the fan power when the vital temperature remains constant and the  
vital temperature is above the set temperature; and  
decreasing the fan power by a third power when the vital temperature remains  
constant and the vital temperature is below the set temperature.

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Claim 36 (new): The method of claim 35 further comprising resetting the fan power to  
a fixed fan power corresponding to a fixed fan speed when the set fan speed differs  
from the fixed fan speed and the vital temperature differs from the set temperature  
by at least a predetermined amount.

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Claim 37 (new): A method for controlling an operating temperature of a computer  
system, the method comprising:

monitoring a rotational speed of a cooling fan installed in a power supply of the  
computer system, the rotational speed of the cooling fan being controlled by  
a fan power;

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monitoring a vital temperature of the computer system; and

setting the fan power according to the vital temperature to control the rotational  
speed of the power supply cooling fan;

wherein setting the fan power further comprises:

maintaining the fan power when the vital temperature increases and the vital  
temperature is below a set temperature;

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maintaining the fan power when the vital temperature remains constant and the  
vital temperature is above the set temperature; and

decreasing the fan power by a third power when the vital temperature remains  
constant and the vital temperature is below the set temperature.

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Claim 38 (new): The method of claim 37 further comprising resetting the fan power to  
a fixed fan power corresponding to a fixed fan speed when the set fan speed differs  
from the fixed fan speed and the vital temperature differs from the set temperature  
by at least a predetermined amount.

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